FAA-E-163b
December 22, 1967
SUPERSEDING
CAA-R-163a, 4/1/53

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION SPECIFICATION

RACK, CABINET AND OPEN FRAME TYPES

1. SCOPE

1.1 Scope.- The racks covered in this specification are of two basic configurations, (1) ventilated steel cabinets with access doors (rear, or front and rear), and (2) open frame racks having no enclosure cabinet. Both configurations have vertical uprights drilled and tapped for mounting standard 19 inch slotted rack panels. The racks specified herein are intended for supporting and/or enclosing small units of electronic equipment, such as receivers, speech amplifiers, control units, rectifiers, and similar units which are assembled on rack panels.

1.2 Classification.- This specification covers five types of racks which differ in dimensions, configuration and hardware. The following "Type" classification terms are used hereinafter to distinguish requirements applicable to each Type of rack:

Classification Term	Description	Panel Space*
Type I	Cabinet Rack, 76 inch, Rear Door	70 inches
Type II	Cabinet Rack, 42-3/4 inch, Rear Door	36-3/4 inches

Classification Term	Description	Panel Space*
Type III	Cabinet Rack, 83 inch, Rear Door	77 inches
Type IV	Cabinet Rack, 83 inch, Front and Rear Doors	77 inches
Type V	Open Frame Rack, 83 inch, (no enclosure)	77 inches

*Design-center panel capacity, based on the 1-3/4 inch panel-size module.

2. APPLICABLE DOCUMENTS

2.1 FAA standard.- The following FAA standard, of the issue specified in the invitation for bids, forms a part of this specification and is applicable to the extent specified hereinafter:

FAA-STD-012 Paint Systems for Equipment

2.2 Other Government publications.- The following Government publications, of the issues in effect on date of invitation for bids, form a part of this specification, and are applicable to the extent specified hereinafter:

Handbook H28 Screw-Thread Standards for Federal Services
MIL-STD-454 Standard General Requirements for Electronic Equipment; Requirement 9 (only)

(Copies of this FAA specification, and of the applicable FAA standard, may be obtained from Federal Aviation Administration, Washington, D.C. 20590, ATTN: Contracting Officer. Requests should fully identify material desired, i.e., the specification number, date, amendment number, standard number, date; also, requests should state the contract number or other use to be made of the material.)

(Requests for information on obtaining copies of Handbook H28 should be directed to Superintendent of Documents, Government Printing Office, Washington, D. C. 20401.)

(Single copies of the referenced Military document may be obtainable from Federal Aviation Administration, Washington, D. C. 20590, Attention: Contracting Officer. Requests should cite the invitation for bids, request for proposals, or the contract involved. Note that mail requests, if found acceptable, will be forwarded to a Military supply depot for filling, hence ample time should be allowed.)

(Information on obtaining copies of the referenced Federal document may be obtained from General Services Administration offices in Washington, D. C., Seattle, San Francisco, Denver, Kansas City, Mo., Chicago, Atlanta, New York, Boston, Dallas, and Los Angeles.)

Classification Term	Description	Panel Space*
Type III	Cabinet Rack, 83 inch, Rear Door	77 inches
Type IV	Cabinet Rack, 83 inch, Front and Rear Doors	77 inches
Type V	Open Frame Rack, 83 inch, (no enclosure)	77 inches

*Design-center panel capacity, based on the 1-3/4 inch panel-size module.

2. APPLICABLE DOCUMENTS

2.1 FAA standard.- The following FAA standard, of the issue specified in the invitation for bids, forms a part of this specification and is applicable to the extent specified hereinafter:

FAA-STD-012 Paint Systems for Equipment

2.2 Other Government publications.- The following Government publications, of the issues in effect on date of invitation for bids, form a part of this specification, and are applicable to the extent specified hereinafter:

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3. REQUIREMENTS

3.1 Equipment to be furnished by contractor.- Each rack and optional item furnished by the contractor shall be complete in accordance with all specification requirements. The contractor shall furnish the quantities specified in the contract schedule of the various types of racks as identified by "Type" classification terms (1.2), together with the optional items called for in the contract schedule for specific rack Types.

3.1.1 Applicability of requirements.- Sections 1, 2, 4, 5, and 6 hereof apply to all rack Types, unless exceptions are specified, or unless the requirements of individual paragraphs cannot be applied to a particular rack Type due to its basic design (for example, paragraphs relating to doors cannot be applied to the open-type rack, Type V). Paragraphs 3.3 to 3.7 and subparagraphs apply to specific Types, and include listings of applicable/general paragraphs (3.8 series), applicable figures, and available options. Paragraphs 3.8 and subparagraphs are requirements applying generally to all types, but with exceptions which are noted; the optional items are included in this group. Detail requirements applicable to each rack Type and the optional items are shown on various figures on the attached drawings D-5731-1, D-5731-2, D-5731-3, D-5731-4, and D-5731-5; and fig. 27.

3.2 Definitions

3.2.1 Rack.- The term "rack*', as applied to Types I to IV cabinet-type racks, shall be construed as meaning the steel enclosure with door(s), and shall include all assembled parts and pieces covered in the text and applicable drawings in this specification exclusive of optional items. The term "rack" also describes the complete Type V open frame rack. Note that use of the earlier terminology "relay rack" is deprecated, although it is synonymous.

3.2.2 Optional items.- As applied in this specification the term "optional!' shall be construed to mean certain accessory installations and square duct openings, as listed and described herein, which shall be furnished by the contractor only when called for in the contract schedule.

3.2.3 Left-hand and right-hand.- All references herein and on the attached drawings to "left-hand" and "right-hand" shall apply when the racks are viewed from the rear, and when facing closed rear doors.

3.3 Type I Cabinet Rack

3.3.1 Configuration.- The Type I rack shall be a 76 inch steel cabinet with front uprights drilled and tapped for standard rack panel mountings, and with a single door at the rear provided with openings for natural ventilation (adaptable for optional forced ventilation). Two square duct openings are provided in the top, and the bottom has a foot-square opening.

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3.2.3 Left-hand and right-hand.- All references herein and on the attached drawings to "left-hand" and "right-hand" shall apply when the racks are viewed from the rear, and when facing closed rear doors.

3.3 Type I Cabinet Rack

3.3.1 Configuration.- The Type I rack shall be a 76 inch steel cabinet with front uprights drilled and tapped for standard rack panel mountings, and with a single door at the rear provided with openings for natural ventilation (adaptable for optional forced ventilation). Two square duct openings are provided in the top, and the bottom has a foot-square opening.

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3.2.2 Optional items.- As applied in this specification the term "optional" shall be construed to mean certain accessory installations and square duct openings, as listed and described herein, which shall be furnished by the contractor only when called for in the contract schedule.

3.2.3 Left-hand and right-hand.- All references herein and on the attached drawings to "left-hand" and "right-hand" shall apply when the racks are viewed from the rear, and when facing closed rear doors.

3.3 Type I Cabinet Rack

3.3.1 Configuration.- The Type I rack shall be a 76 inch steel cabinet with front uprights drilled and tapped for standard rack panel mountings, and with a single door at the rear provided with openings for natural ventilation (adaptable for optional forced ventilation). Two square duct openings are provided in the top, and the bottom has a foot-square opening.

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3.2.1 Rack.- The term "rack", as applied to Types I to IV cabinet-type racks, shall be construed as meaning the steel enclosure with door(s), and shall include all assembled parts and pieces covered in the text and applicable drawings in this specification exclusive of optional items. The term "rack" also describes the complete Type V open frame rack. Note that use of the earlier terminology "relay rack" is deprecated, although it is synonymous.

3.2.2 Optional items.- As applied in this specification the term "optional" shall be construed to mean certain accessory installations and square duct openings, as listed and described herein, which shall be furnished by the contractor only when called for in the contract schedule.

3.2.3 Left-hand and right-hand.- All references herein and on the attached drawings to "left-hand" and "right-hand" shall apply when the racks are viewed from the rear, and when facing closed rear doors.

3.3 Type I Cabinet Rack

3.3.1 Configuration.- The Type I rack shall be a 76 inch steel cabinet with front uprights drilled and tapped for standard rack panel mountings, and with a single door at the rear provided with openings for natural ventilation (adaptable for optional forced ventilation). Two square duct openings are provided in the top, and the bottom has a foot-square opening.

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3.1 Equipment to be furnished by contractor.- Each rack and optional item furnished by the contractor shall be complete in accordance with all specification requirements. The contractor shall furnish the quantities specified in the contract schedule of the various types of racks as identified by "Type" classification terms (1.2), together with the optional items called for in the contract schedule for specific rack Types.

3.1.1 Applicability of requirements.- Sections 1, 2, 4, 5, and 6 hereof apply to all rack Types, unless exceptions are specified, or unless the requirements of individual paragraphs cannot be applied to a particular rack Type due to its basic design (for example, paragraphs relating to doors cannot be applied to the open-type rack, Type V). Paragraphs 3.3 to 3.7 and subparagraphs apply to specific Types, and include listings of applicable/general paragraphs (3.8 series), applicable figures, and available options. Paragraphs 3.8 and subparagraphs are requirements applying generally to all types, but with exceptions which are noted; the optional items are included in this group. Detail requirements applicable to each rack Type and the optional items are shown on various figures on the attached drawings D-5731-1, D-5731-2, D-5731-3, D-5731-4, and D-5731-5; and fig. 27.

3.2 Definitions

3.2.1 Rack.- The term "rack", as applied to Types I to IV cabinet-type racks, shall be construed as meaning the steel enclosure with door(s), and shall include all assembled parts and pieces covered in the text and applicable drawings in this specification exclusive of optional items. The term "rack" also describes the complete Type V open frame rack. Note that use of the earlier terminology "relay rack" is deprecated, although it is synonymous.

3.2.2 Optional items.- As applied in this specification the term "optional" shall be construed to mean certain accessory installations and square duct openings, as listed and described herein, which shall be furnished by the contractor only when called for in the contract schedule.

3.2.3 Left-hand and right-hand.- All references herein and on the attached drawings to "left-hand" and "right-hand" shall apply when the racks are viewed from the rear, and when facing closed rear doors.

3.3 Type I Cabinet Rack

3.3.1 Configuration.- The Type I rack shall be a 76 inch steel cabinet with front uprights drilled and tapped for standard rack panel mountings, and with a single door at the rear provided with openings for natural ventilation (adaptable for optional forced ventilation). Two square duct openings are provided in the top, and the bottom has a foot-square opening.

3.6.4 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type IV rack:

3.8 to 3.8.9.3.1
3.8.9.3.3 . . 3.8.9.5.4
3.8.10.1
3.8.10.3 . . 3.8.10.7
3.8.12.1

3.6.5 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type IV rack:

D-5731-1: Figures 1 (part), 2 (part), 3, 4; Table III
D-5731-2: Figures 6, 6a, 7 (part), 7a, 8
D-5731-3: Figures 10, 12, 13B, 13C, 14
D-5731-4: Figures 15, 16, 17, 20

3.7 Type V Open Frame Rack

3.7.1 Configuration.- The Type V rack shall be an 83 inch open frame type rack with upright channels drilled and tapped for standard rack panel mounting.

3.7.2 Hardware.- Each Type V rack shall be furnished complete with the following items:

100 each - Panel mounting screws (Table I, Item 1)

1 each - 2 ounce can matching browntouch up enamel

4 each - Tie bolt, nut and lock washer (Table I, Items 11, 12, 13)

3.7.3 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type V rack:

3.8 to 3.8.4.3
3.8.5 . . 3.8.6.2
3.8.8 . . 3.8.8.5
3.8.10.2, 3.8.10.3, 3.8.10.4, 3.8.10.6

3.7.4 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type V rack:

D-5731-5: Figures 23 through 26, inclusive

3.8 General requirements

3.8.1 Workmanship

3.8.1.1 Military standard.- Workmanship shall be in accordance with MIL-STD-454, Requirement 9.

3.6.4 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type IV rack:

3.8 to 3.8.9.3.1
3.8.9.3.3 . . 3.8.9.5.4
3.8.10.1
3.8.10.3 . . 3.8.10.7
3.8.12.1

3.6.5 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type IV rack:

D-5731-1: Figures 1 (part), 2 (part), 3, 4; Table III
D-5731-2: Figures 6, 6a, 7 (part), 7a, 8
D-5731-3: Figures 10, 12, 13B, 13C, 14
D-5731-4: Figures 15, 16, 17, 20

3.7 Type V Open Frame Rack

3.7.1 Configuration.- The Type V rack shall be an 83 inch open frame type rack with upright channels drilled and tapped for standard rack panel mounting.

3.7.2 Hardware.- Each Type V rack shall be furnished complete with the following items:

100 each - Panel mounting screws (Table I, Item 1)

1 each - 2 ounce can matching browntouch up enamel

4 each - Tie bolt, nut and lock washer (Table I, Items 11, 12, 13)

3.7.3 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type V rack:

3.8 to 3.8.4.3
3.8.5 . . 3.8.6.2
3.8.8 . . 3.8.8.5
3.8.10.2, 3.8.10.3, 3.8.10.4, 3.8.10.6

3.7.4 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type V rack:

D-5731-5: Figures 23 through 26, inclusive

3.8 General requirements

3.8.1 Workmanship

3.8.1.1 Military standard.- Workmanship shall be in accordance with MIL-STD-454, Requirement 9.

3.6.4 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type IV rack:

3.8 to 3.8.9.3.1
3.8.9.3.3 . . 3.8.9.5.4
3.8.10.1
3.8.10.3 . . 3.8.10.7
3.8.12.1

3.6.5 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type IV rack:

D-5731-1: Figures 1 (part), 2 (part), 3, 4; Table III
D-5731-2: Figures 6, 6a, 7 (part), 7a, 8
D-5731-3: Figures 10, 12, 13B, 13C, 14
D-5731-4: Figures 15, 16, 17, 20

3.7 Type V Open Frame Rack

3.7.1 Configuration.- The Type V rack shall be an 83 inch open frame type rack with upright channels drilled and tapped for standard rack panel mounting.

3.7.2 Hardware.- Each Type V rack shall be furnished complete with the following items:

100 each - Panel mounting screws (Table I, Item 1)

1 each - 2 ounce can matching browntouch up enamel

4 each - Tie bolt, nut and lock washer (Table I, Items 11, 12, 13)

3.7.3 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type V rack:

3.8 to 3.8.4.3
3.8.5 . . 3.8.6.2
3.8.8 . . 3.8.8.5
3.8.10.2, 3.8.10.3, 3.8.10.4, 3.8.10.6

3.7.4 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type V rack:

D-5731-5: Figures 23 through 26, inclusive

3.8 General requirements

3.8.1 Workmanship

3.8.1.1 Military standard.- Workmanship shall be in accordance with MIL-STD-454, Requirement 9.

3.6.4 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type IV rack:

3.8 to 3.8.9.3.1
3.8.9.3.3 . . 3.8.9.5.4
3.8.10.1
3.8.10.3 . . 3.8.10.7
3.8.12.1

3.6.5 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type IV rack:

D-5731-1: Figures 1 (part), 2 (part), 3, 4; Table III
D-5731-2: Figures 6, 6a, 7 (part), 7a, 8
D-5731-3: Figures 10, 12, 13B, 13C, 14
D-5731-4: Figures 15, 16, 17, 20

3.7 Type V Open Frame Rack

3.7.1 Configuration.- The Type V rack shall be an 83 inch open frame type rack with upright channels drilled and tapped for standard rack panel mounting.

3.7.2 Hardware.- Each Type V rack shall be furnished complete with the following items:

100 each - Panel mounting screws (Table I, Item 1)

1 each - 2 ounce can matching browntouch up enamel

4 each - Tie bolt, nut and lock washer (Table I, Items 11, 12, 13)

3.7.3 Applicable general requirements.- The following general requirements paragraphs shall apply to the Type V rack:

3.8 to 3.8.4.3
3.8.5 . . 3.8.6.2
3.8.8 . . 3.8.8.5
3.8.10.2, 3.8.10.3, 3.8.10.4, 3.8.10.6

3.7.4 Applicability of drawing figures.- The following figures on the attached D-5731 series of drawings shall apply to the Type V rack:

D-5731-5: Figures 23 through 26, inclusive

3.8 General requirements

3.8.1 Workmanship

3.8.1.1 Military standard.- Workmanship shall be in accordance with MIL-STD-454, Requirement 9.

shall be as listed below:

Rack Classification Term (see 3.8.8.3)	Nameplate title
I	CABINET RACK-76"-REAR DOOR
II	CABINET RACK-42 3/4"-REAR DOOR
III	CABINET RACK-83"-REAR DOOR
IV	CABINET RACK-83"-TWO DOORS
V	OPEN-FRAME RACK - 83"

3.8.8.3 Nameplate type designations.- The type designations for each type of rack on the contract shall be obtained from the Contracting Officer under each individual contract, Note that the specification classification terms (1.2, Type I, II, etc.) shall not be used on the nameplate.

3.8.8.4 Serial numbers.- Serial numbers shall start with 1 for each rack having an individual type designation and continue consecutively up to the total number of such rack units on the contract.

3.8.8.5 Contractor's nameplate drawing.- Before manufacturing the nameplates, the contractor shall submit his detailed manufacturing drawing of the nameplate to Federal Aviation Administration, Washington, D. C. 20590, Attention: Contracting Officer, for checking of entries and other requirements. The drawing shall be in complete detail showing all entries, except that the rack type designation, if not known to the contractor, may be omitted. In such case, the type designation will be assigned when the checked. drawing is returned to the contractor.

3.8.9 Doors

3.8.9.1 Door clearance.- Clearance between door and cabinet shall insure the best compromise between closeness of fit and ease of opening and closing without scraping.

3.8.9.2 Vent plates.- Two each perforated vent plates (fig. 8) shall be provided and installed in each door (see 3.8.15.2 for an exception applicable when an optional blower installation is specified).

3.8.9.3 Door catch mechanism

3.8.9.3.1 Three-point door catch (Types I, III, IV).- A three-point door catch (cam and two rods) shall be installed, The cams and rods shall nest against the inner edges of the rack members (metal shall not be cut away from the rack members for this purpose).

3.8.9.3.2 One-point door catch (Type II).- A one-point door catch (cam only) shall be installed.

shall be as listed below:

Rack Classification Term (see 3.8.8.3)	Nameplate title
I	CABINET RACK-76"-REAR DOOR
II	CABINET RACK-42 3/4"-REAR DOOR
III	CABINET RACK-83"-REAR DOOR
IV	CABINET RACK-83"-TWO DOORS
V	OPEN-FRAME RACK - 83"

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3.8.9 Doors

3.8.9.1 Door clearance.- Clearance between door and cabinet shall insure the best compromise between closeness of fit and ease of opening and closing without scraping.

3.8.9.2 Vent plates.- Two each perforated vent plates (fig. 8) shall be provided and installed in each door (see 3.8.15.2 for an exception applicable when an optional blower installation is specified).

3.8.9.3 Door catch mechanism

3.8.9.3.1 Three-point door catch (Types I, III, IV).- A three-point door catch (cam and two rods) shall be installed, The cams and rods shall nest against the inner edges of the rack members (metal shall not be cut away from the rack members for this purpose).

3.8.9.3.2 One-point door catch (Type II).- A one-point door catch (cam only) shall be installed.

shall be as listed below:

Rack Classification Term (see 3.8.8.3)	Nameplate title
I	CABINET RACK-76"-REAR DOOR
II	CABINET RACK-42 3/4"-REAR DOOR
III	CABINET RACK-83"-REAR DOOR
IV	CABINET RACK-83"-TWO DOORS
V	OPEN-FRAME RACK - 83"

3.8.8.3 Nameplate type designations.- The type designations for each type of rack on the contract shall be obtained from the Contracting Officer under each individual contract, Note that the specification classification terms (1.2, Type I, II, etc.) shall not be used on the nameplate.

3.8.8.4 Serial numbers.- Serial numbers shall start with 1 for each rack having an individual type designation and continue consecutively up to the total number of such rack units on the contract.

3.8.8.5 Contractor's nameplate drawing.- Before manufacturing the nameplates, the contractor shall submit his detailed manufacturing drawing of the nameplate to Federal Aviation Administration, Washington, D. C. 20590, Attention: Contracting Officer, for checking of entries and other requirements. The drawing shall be in complete detail showing all entries, except that the rack type designation, if not known to the contractor, may be omitted. In such case, the type designation will be assigned when the checked. drawing is returned to the contractor.

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3.8.9.2 Vent plates.- Two each perforated vent plates (fig. 8) shall be provided and installed in each door (see 3.8.15.2 for an exception applicable when an optional blower installation is specified).

3.8.9.3 Door catch mechanism

3.8.9.3.1 Three-point door catch (Types I, III, IV).- A three-point door catch (cam and two rods) shall be installed, The cams and rods shall nest against the inner edges of the rack members (metal shall not be cut away from the rack members for this purpose).

3.8.9.3.2 One-point door catch (Type II).- A one-point door catch (cam only) shall be installed.

shall be as listed below:

Rack Classification Term (see 3.8.8.3)	Nameplate title
I	CABINET RACK-76"-REAR DOOR
II	CABINET RACK-42 3/4"-REAR DOOR
III	CABINET RACK-83"-REAR DOOR
IV	CABINET RACK-83"-TWO DOORS
V	OPEN-FRAME RACK - 83"

3.8.8.3 Nameplate type designations.- The type designations for each type of rack on the contract shall be obtained from the Contracting Officer under each individual contract, Note that the specification classification terms (1.2, Type I, II, etc.) shall not be used on the nameplate.

3.8.8.4 Serial numbers.- Serial numbers shall start with 1 for each rack having an individual type designation and continue consecutively up to the total number of such rack units on the contract.

3.8.8.5 Contractor's nameplate drawing.- Before manufacturing the nameplates, the contractor shall submit his detailed manufacturing drawing of the nameplate to Federal Aviation Administration, Washington, D. C. 20590, Attention: Contracting Officer, for checking of entries and other requirements. The drawing shall be in complete detail showing all entries, except that the rack type designation, if not known to the contractor, may be omitted. In such case, the type designation will be assigned when the checked. drawing is returned to the contractor.

3.8.9 Doors

3.8.9.1 Door clearance.- Clearance between door and cabinet shall insure the best compromise between closeness of fit and ease of opening and closing without scraping.

3.8.9.2 Vent plates.- Two each perforated vent plates (fig. 8) shall be provided and installed in each door (see 3.8.15.2 for an exception applicable when an optional blower installation is specified).

3.8.9.3 Door catch mechanism

3.8.9.3.1 Three-point door catch (Types I, III, IV).- A three-point door catch (cam and two rods) shall be installed, The cams and rods shall nest against the inner edges of the rack members (metal shall not be cut away from the rack members for this purpose).

3.8.9.3.2 One-point door catch (Type II).- A one-point door catch (cam only) shall be installed.

below the rear door. The following references and illustrations apply:

Types I, III, IV: Table III-E; Fig. 3; details on Fig. 7.

Type II: Table III-E; Fig. 3; details in 3.8.13.2.

3.8.13.6 Optional side square duct openings.- When specified as an option for Types I, II, III, IV racks, a square duct opening shall be provided in each side of the rack at the bottom. The following references and illustrations apply:

Types I, III, IV: Table III-J; Fig. 2; details on Fig. 7.

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3.8.14 Optional plug-in strip installation

3.8.14.1 Plug-in strip installation.- When called out as a required option (see 3.2.2) for a specific rack Type, a plug-in strip installation with circuit breaker equipment shall be provided in accordance with the following group of subparagraphs (3.8.14 series).

3.8.14.2 Plug-in strip mounting.- The plug-in strip and the circuit breaker equipment listed hereunder shall be assembled and mounted on the right-hand side of the rack, in accordance with fig. 7, using hardware items 25 to 28, Table I (also see 3.8.14.7(c)). Mounting holes in the accessory mounting bracket shall be tapped. The main body of the plug-in strip shall be screwed to the accessory mounting bracket or secured by straps screwed to the bracket. Snap-in supporting clips are not acceptable for this purpose.

3.8.14.3 Plug-in strip (Type I).- The plug-in strip (rated 15 A 125 V) shall provide ten grounding-type (wire ground) outlets at intervals of 6 inches, It shall be one of the following, or equal: National Electric RCF2GW-606-6 series equipment as shown on Fig. 14 (Porter Electrical Division, Porter Building, Pittsburgh, Pa.), or Plugmold Kit for Racks, Drawing ED-30750-1 (The Wiremold Co., Hartford, Conn. 06110).

3.8.14.4 Plug-in strip (Type II).- The plug-in strip (rated 15 A 125 V) shall provide four grounding-type (wire ground) outlets at intervals of 6 inches. It shall be one of the following, or equal: National Electric RCF2GW-603-6 series equipment as shown on Fig. 14 (Porter Electrical Division, Porter Building, Pittsburgh, Pa.), or Plugmold Kit for Racks, Drawing ED-30751-1 (The Wiremold Co., Hartford, Conn. 06110).

3.8.14.5 Plug-in strip (Type III, IV).- The plug-in strip (rated 15 A 125 V) shall provide eleven grounding-type (wire ground) outlets at intervals of 6 inches. It shall be one of the following, or equal: National Electric RCF2GW-606-6 series equipment as shown on Fig. 14 (Porter Electrical Division, Porter Building, Pittsburgh, Pa.), or Plugmold Kit for Racks, Drawing ED-31723 (The Wiremold Co., Hartford, Conn. 06110).

3.8.14.6 Circuit breaker equipment.- The plug-in strip shall terminate in circuit breaker equipment (as shown in fig. 7) consisting of a single pole 20 A 120 V manual-reset circuit breaker, solid neutral (ungrounded), mounted

below the rear door. The following references and illustrations apply:

Types I, III, IV: Table III-E; Fig. 3; details on Fig. 7.

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the side facing into the blower housing and secured by enveloping or folding the four flanges of the cover plate over (180°)onto the hardware cloth or mesh.

3.8.15.14 Power receptacle.- A grounding-type three-pole male recessed receptacle shall be provided and mounted on the left side of the blower housing. The receptacle shall be industry No.7486G,midget flush base, 3-wire polarized, grounded, twist-lock type, 15A 125 V. The mating connector shall be provided to fit the recessed receptacle, industry No. 7484midget 3-wire twist-lock connector, cord grip, 15A 125 V.

3.8.15.15 Blower Switch.- A double-pole single-throw toggle switch shall be provided and installed on the upper side of the blower housing for use in turning the blower on and off. The switch shall be provided with an on-off plate.

3.8.15.16 Blower wiring.- The two current leads from the motor shall be connected to the toggle switch terminals. An additional pair of wires shall be run from the switch to the current terminals of the power receptacle. In addition, a third wire lead shall be run, from a screw tapped into (or bolted to) the motor case, to a mounting screw on the power receptacle. All leads shall be soldered to the respective terminal lugs, and shall be clamped, laced, or taped to the structure so as to avoid interference with the fan blades and destructive flexing due to vibration and air turbulence. Refer to fig. 27 (page 29)for wiring details.

3.8.15.17 Blower mounting.- The blower assembly shall be mounted in the lower vent opening in the rear door of the rack, in lieu of the lower vent plate, and shall project entirely inside the rack cabinet.

3.8.15.18 Blower power cord.- The blower power cord shall consist of the cable-half of the twist-lock connector attached to a length of three-conductor #18type SJ rubber covered cord. A 1/2 inch (conduit size) threaded porcelain bushing, with conduit nut, shall be provided in the rear convenience outlet receptacle box. The blower cord shall be fed through the porcelain bushing into the rear convenience receptacle box and shall be connected to line and ground terminals of the -receptacle (fig. 27). The cord shall be clamped to the rack (but not to the door) in a position which will allow it to flex freely when the door is fully opened and closed. The rack door shall be free for removal merely by lifting it to separate the hinges when the twist-lock receptacle is disengaged. There shall be no connection from ground (rack frame) to the line terminals of the blower circuit (twist-lock receptacle engaged). There shall be a metallic circuit from the motor case to the rack frame (independent of contact through door hinges).

3.8.15.19 Locked rotor protection.- The motor shall not be damaged with the rotor continuously locked under worst-case conditions of 3.8.15.5(r). Protective means shall be incorporated as necessary to meet this requirement (capability to sustain locked rotor without damage; thermal cutout; fuse; circuit breaker: or equivalent).

4. QUALITY ASSURANCE PROVISIONS

4.1 General inspection provisions.- Unless otherwise specified in the contract, all tests and inspection to determine compliance with the electrical and mechanical requirements of the contract specifications shall be made by the contractor and shall be subject to Government inspection. The term "Government inspection" as used in this specification means that an FAA representative will witness the contractor's testing and inspection, and will carry out such visual and other inspection as deemed necessary to assure compliance with contract requirements. The Government reserves the

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4.6.6 Grounding test.- Tests shall be made as follows: The rack shall be insulated from ground by means of wood strips. A lo-watt test lamp shall be used, powered from the 115 volt line, and provided with two insulated test prods. One prod shall be touched to the rack frame (for example, to the head of an unpainted screw which is tapped into the rack), while the other prod is touched to each side of the convenience outlet circuit (blower plugged-in and blower switch on), and to each side of the plug-in strip circuit. Any visible glow in the lamp shall be cause for rejection of the wiring affected.

4.6.7 Squareness (panel mounting surfaces).- Tests shall be made to determine compliance with paragraph 3.8.5.5.

5. PREPARATION FOR DELIVERY

5 .1 Packing of racks.- Each rack and its associated hardware (3.3.3, 3.4.3, 3.5.3, 3.6.3, 3.7.2) shall be packed together in a single wooden box or crate in such a manner as to prevent shifting within the box during shipment. Each shipping container shall be steel banded. Blower motors (when blower installations are furnished) shall be adequately braced using soft wadded packing material or similar means to prevent damage to the supports, shock mounts, and fan blades during transit.

5.1.1 Domestic shipment.- Except where export shipping is required by the contract, each rack shall be prepared for boxing by a layer of kraft paper (60# minimum weight) on topof which shall be placed a layer of corrugated paper (35# minimum weight); both of these layers shall cover the entire rack. A second layer of similar corrugated paper shall be applied at all points of contact between first such layer and the shipping container.

5.1.2 Export shipment.- Where export shipping is required by the contract, each rack shall be prepared for export shipment in a manner identical to that specified in 5.1 except that a layer of waterproof paper shall be placed on top of the layers specified in 5.1.1 and the container shall be a tight wooden box with two wooden skids, measuring not less than 1-1/2" x 3" in cross section, attached to the bottom.

5.2 Marking.- Each shipping container shall be marked to allow identification for storage purposes without the necessity of unpacking. The following (as a minimum) are required: Title and type designation, as shown on nameplate, plus the following:

Options (such as: WITH PLUG-IN STRIP AND BLOWER).

Contract and/or purchase order number/s.

Contractor's name.

5.3 Unpacking instructions.- In case special unpacking procedure must be followed in order to prevent damage to items in shipping containers, concise unpacking instructions shall be attached to the outside of each shipping case in a manner which will prevent damage or loss of legibility while

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4.6.7 Squareness (panel mounting surfaces).- Tests shall be made to determine compliance with paragraph 3.8.5.5.

5. PREPARATION FOR DELIVERY

5 .1 Packing of racks.- Each rack and its associated hardware (3.3.3, 3.4.3, 3.5.3, 3.6.3, 3.7.2) shall be packed together in a single wooden box or crate in such a manner as to prevent shifting within the box during shipment. Each shipping container shall be steel banded. Blower motors (when blower installations are furnished) shall be adequately braced using soft wadded packing material or similar means to prevent damage to the supports, shock mounts, and fan blades during transit.

5.1.1 Domestic shipment.- Except where export shipping is required by the contract, each rack shall be prepared for boxing by a layer of kraft paper (60# minimum weight) on topof which shall be placed a layer of corrugated paper (35# minimum weight); both of these layers shall cover the entire rack. A second layer of similar corrugated paper shall be applied at all points of contact between first such layer and the shipping container.

5.1.2 Export shipment.- Where export shipping is required by the contract, each rack shall be prepared for export shipment in a manner identical to that specified in 5.1 except that a layer of waterproof paper shall be placed on top of the layers specified in 5.1.1 and the container shall be a tight wooden box with two wooden skids, measuring not less than 1-1/2" x 3" in cross section, attached to the bottom.

5.2 Marking.- Each shipping container shall be marked to allow identification for storage purposes without the necessity of unpacking. The following (as a minimum) are required: Title and type designation, as shown on nameplate, plus the following:

Options (such as: WITH PLUG-IN STRIP AND BLOWER).

Contract and/or purchase order number/s.

Contractor's name.

5.3 Unpacking instructions.- In case special unpacking procedure must be followed in order to prevent damage to items in shipping containers, concise unpacking instructions shall be attached to the outside of each shipping case in a manner which will prevent damage or loss of legibility while

TABLE I MOUNTING HARDWARE-Concluded

ITEM	FASTENER	QUANTITY PER TYPE OF RACK					MOUNTING OR OTHER USE	TYPE	SIZE	MATERIAL*	FINISH*
		I	II	III	IV	V					
39	Lockwasher	1	1	1	1	-	Blower cable clamp	Unspecified	To fit	Phosphor bronze	NCTC
40	Machine screw	12	6	12	12	-	Side closing plate	Flat head	8-32 x 3/8"	Brass	BNC
41	Machine screw nut	12	6	12	12	-	Side closing plate	Hexagon	8-32	Brass	NCTC
42	Lockwasher	12	6	12	12	-	Side closing plate	Internal tooth	#8	Phosphor bronze	NCTC
43	Machine screw	6	3	6	6	-	Rear closing plate	Pan head or binder head	8-32 x 3/8"	Brass	BNC
44	Machine. screw nut	6	3	6	6	-	Rear closing plate	Hexagon	8-32	Brass	NCTC
45	Lockwasher	6	3	6	6	-	Rear closing plate	Internal tooth	#8	Phosphor bronze .	NCTC

NOTES: *Stainless steel (less plating) may be substituted for all except Items 1 and 2.
**Quantity correct for vent plates, or vent plate and optional blower installation.

NCTC: White or bright nickel, chromium, tin, or cadmium
BNC: Bright nickel or chromium
ZCC: Zinc; white or bright chromium over nickel & copper; white or bright cadmium

ITEMS 25 TO 45 ARE FOR OPTIONAL EQUIPMENT

TABLE I MOUNTING HARDWARE-Concluded

ITEM	FASTENER	QUANTITY PER TYPE OF RACK					MOUNTING OR OTHER USE	TYPE	SIZE	MATERIAL*	FINISH*
		I	II	III	IV	V					
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41	Machine screw nut	12	6	12	12	-	Side closing plate	Hexagon	8-32	Brass	NCTC
42	Lockwasher	12	6	12	12	-	Side closing plate	Internal tooth	#8	Phosphor bronze	NCTC
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44	Machine. screw nut	6	3	6	6	-	Rear closing plate	Hexagon	8-32	Brass	NCTC
45	Lockwasher	6	3	6	6	-	Rear closing plate	Internal tooth	#8	Phosphor bronze .	NCTC

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44	Machine. screw nut	6	3	6	6	-	Rear closing plate	Hexagon	8-32	Brass	NCTC
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45	Lockwasher	6	3	6	6	-	Rear closing plate	Internal tooth	#8	Phosphor bronze .	NCTC

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ITEMS 25 TO 45 ARE FOR OPTIONAL EQUIPMENT

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44	Machine. screw nut	6	3	6	6	-	Rear closing plate	Hexagon	8-32	Brass	NCTC
45	Lockwasher	6	3	6	6	-	Rear closing plate	Internal tooth	#8	Phosphor bronze .	NCTC

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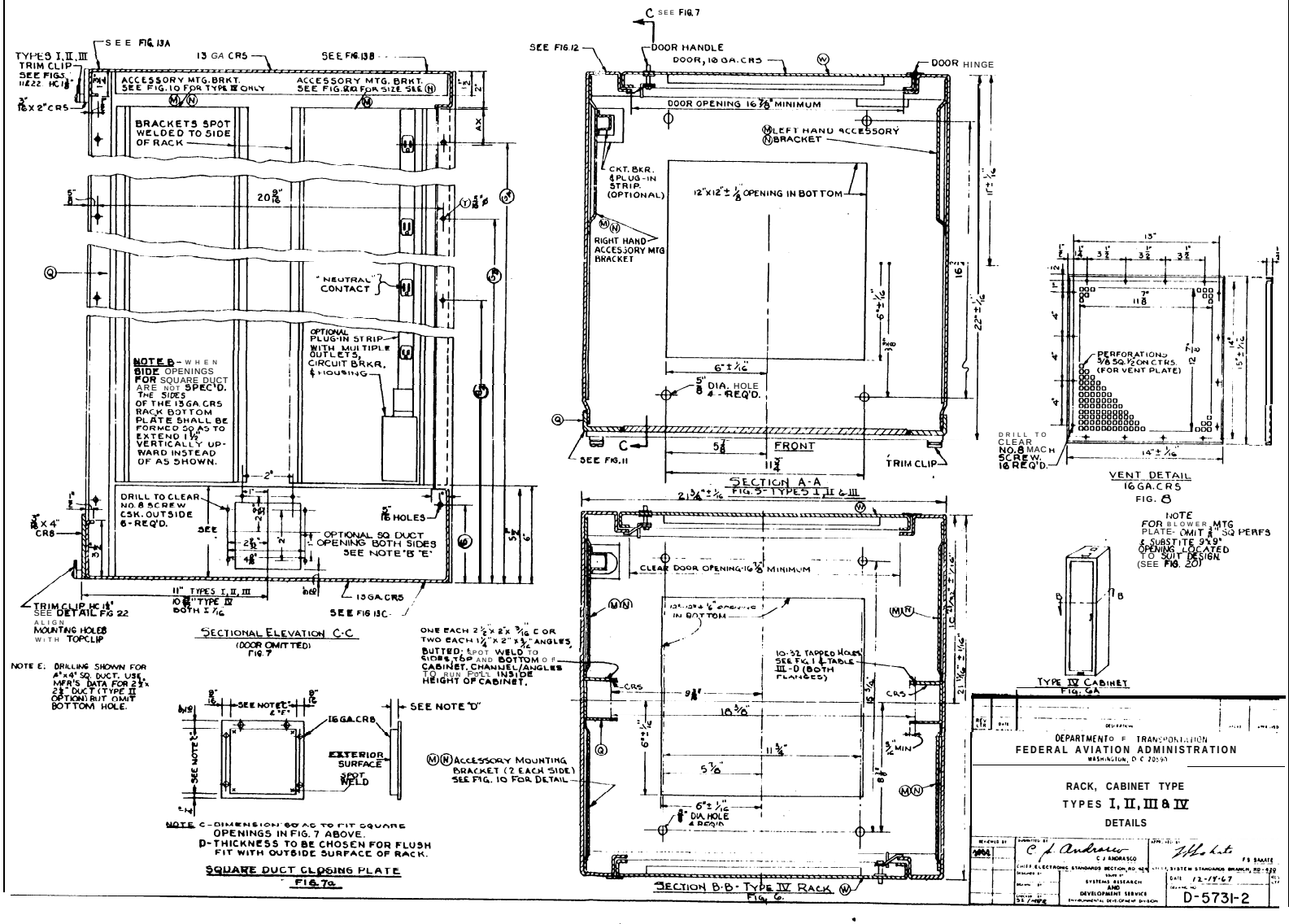
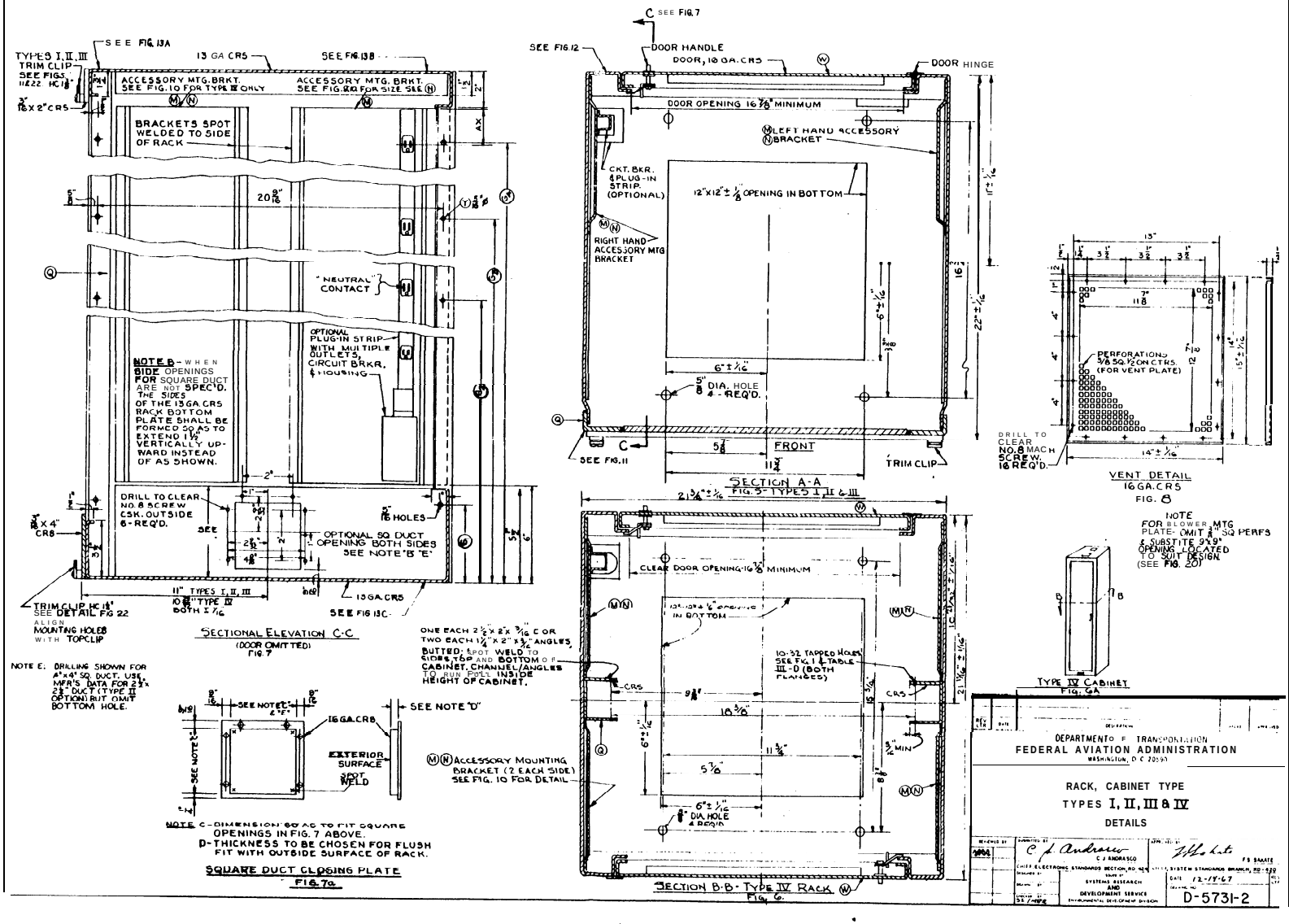
ITEMS 25 TO 45 ARE FOR OPTIONAL EQUIPMENT


TYPES I, II, III TRIM CLIP SEE FIGS. 11&22 HC18
SEE FIG. 13A
13 GA CRS
SEE FIG. 13B
ACCESSORY MTG. BRKT. SEE FIG. 10 FOR TYPE III ONLY
ACCESSORY MTG. BRKT. SEE FIG. 9 & 10 FOR SIZE SEE (N)
BRACKETS SPOT WELDED TO SIDE OF RACK
20 9/16"
"NEUTRAL" CONTACT
OPTIONAL PLUG-IN STRIP WITH MULTIPLE OUTLETS, CIRCUIT BRKR. & HOUSING
NOTE B - WHEN SIDE OPENINGS FOR SQUARE DUCT ARE NOT SPEC'D. THE SIDES OF THE 13 GA CRS RACK BOTTOM PLATE SHALL BE FORMED SO AS TO EXTEND 1 1/2" VERTICALLY UPWARD INSTEAD OF AS SHOWN.
DRILL TO CLEAR NO. 8 SCREW CSK. OUTSIDE 6 - REQ'D.
16 HOLES
OPTIONAL SQ. DUCT OPENING BOTH SIDES SEE NOTE "B" "E"
11" TYPES I, II, III
10 5/8" TYPE IV BOTH I 7/16
13 GA. CRS
SEE FIG 13C
TRIM CLIP HC18 SEE DETAIL FIG 22
ALIGN MOUNTING HOLES WITH TOPCLIP
SECTIONAL ELEVATION C-C (DOOR OMITTED) FIG. 7
NOTE E: DRILLING SHOWN FOR 8"x4" SQ. DUCT. USE MFR'S DATA FOR 2 1/2" x 2 3/4" DUCT (TYPE III OPTION) BUT OMIT BOTTOM HOLE.
SEE NOTE "C"
16 GA. CRS
SEE NOTE "D"
EXTERIOR SURFACE SPOT WELD
NOTE C - DIMENSION SO AS TO FIT SQUARE OPENINGS IN FIG. 7 ABOVE.
D - THICKNESS TO BE CHOSEN FOR FLUSH FIT WITH OUTSIDE SURFACE OF RACK.
SQUARE DUCT CLOSING PLATE FIG. 7a
C SEE FIG. 7
SEE FIG. 12
DOOR HANDLE
DOOR, 16 GA. CRS
DOOR HINGE
DOOR OPENING 16 7/8" MINIMUM
(M) LEFT HAND ACCESSORY (N) BRACKET
CKT. BKR. & PLUG-IN STRIP. (OPTIONAL)
12"X12" ± 1/8" OPENING IN BOTTOM
(M)(N) RIGHT HAND ACCESSORY MTG BRACKET
6" ± 1/16"
5" DIA. HOLE 4 - REQ'D.
SEE FIG. 11
FRONT
TRIM CLIP
SECTION A-A FIG. 5 - TYPES I, II & III
CLEAR DOOR OPENING 16 1/8" MINIMUM
(M)(N) ACCESSORY MOUNTING BRACKET (2 EACH SIDE) SEE FIG. 10 FOR DETAIL
ONE EACH 2 1/2" x 2" x 3/16" C OR TWO EACH 1 1/4" x 2" x 3/16" ANGLES BUTTED & SPOT WELD'D TO SIDES, TOP AND BOTTOM OF CABINET. CHANNEL/ANGLES TO RUN FOR'S INSIDE HEIGHT OF CABINET.
10-32 TAPPED HOLES SEE FIG. 11 TABLE III-D (BOTH FLANGES)
8" DIA. HOLE 4 REQ'D
SECTION B-B - TYPE IV RACK FIG. 6
DRILL TO CLEAR NO. 8 MACH SCREW 16 REQ'D.
PERFORATIONS 5/8 SQ. 1/2 ON CTRS. (FOR VENT PLATE)
VENT DETAIL 16 GA. CRS FIG. 8
NOTE FOR BLOWER MTG PLATE - OMIT 3/8" SQ PERFS & SUBSTITUTE 9"x9" OPENING LOCATED TO SUIT DESIGN (SEE FIG. 20)
TYPE IV CABINET FIG. 6A
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591
RACK, CABINET TYPE
TYPES I, II, III & IV
DETAILS
C. J. ANDRASCO
SYSTEMS RESEARCH AND DEVELOPMENT SERVICE
12-17-67
D-5731-2


TYPES I, II, III TRIM CLIP SEE FIGS. 11&22 HC18
SEE FIG. 13A
13 GA CRS
SEE FIG. 13B
ACCESSORY MTG. BRKT. SEE FIG. 10 FOR TYPE III ONLY
ACCESSORY MTG. BRKT. SEE FIG. 9 & 10 FOR SIZE SEE (N)
BRACKETS SPOT WELDED TO SIDE OF RACK
20 9/16"
"NEUTRAL" CONTACT
OPTIONAL PLUG-IN STRIP WITH MULTIPLE OUTLETS, CIRCUIT BRKR. & HOUSING
NOTE B - WHEN SIDE OPENINGS FOR SQUARE DUCT ARE NOT SPEC'D. THE SIDES OF THE 13 GA CRS RACK BOTTOM PLATE SHALL BE FORMED SO AS TO EXTEND 1 1/2" VERTICALLY UPWARD INSTEAD OF AS SHOWN.
DRILL TO CLEAR NO. 8 SCREW CSK. OUTSIDE 6 - REQ'D.
OPTIONAL SQ. DUCT OPENING BOTH SIDES SEE NOTE "B" "E"
16 HOLES
TRIM CLIP HC18 SEE DETAIL FIG 22
ALIGN MOUNTING HOLES WITH TOPCLIP
11" TYPES I, II, III
10 5/8" TYPE IV BOTH I 7/16
13 GA. CRS
SEE FIG 13C
SECTIONAL ELEVATION C-C (DOOR OMITTED) FIG. 7
NOTE E: DRILLING SHOWN FOR 8" x 4" SQ. DUCT. USE MFR'S DATA FOR 2 1/2" x 2 3/4" DUCT (TYPE III OPTION) BUT OMIT BOTTOM HOLE.
SEE NOTE "C"
SEE NOTE "D"
16 GA. CRS
EXTERIOR SURFACE SPOT WELD
NOTE C - DIMENSION SO AS TO FIT SQUARE OPENINGS IN FIG. 7 ABOVE.
D - THICKNESS TO BE CHOSEN FOR FLUSH FIT WITH OUTSIDE SURFACE OF RACK.
SQUARE DUCT CLOSING PLATE FIG. 7a
C SEE FIG. 7
SEE FIG. 12
DOOR HANDLE
DOOR, 16 GA. CRS
DOOR HINGE
DOOR OPENING 16 7/8" MINIMUM
(M) LEFT HAND ACCESSORY (N) BRACKET
CKT. BKR. & PLUG-IN STRIP. (OPTIONAL)
12" X 12" ± 1/8" OPENING IN BOTTOM
(M)(N) RIGHT HAND ACCESSORY MTG BRACKET
6" ± 1/16"
5" DIA. HOLE 4 - REQ'D.
SEE FIG. 11
FRONT
TRIM CLIP
SECTION A-A FIG. 5 - TYPES I, II & III
CLEAR DOOR OPENING 16 1/8" MINIMUM
10-32 TAPPED HOLES SEE FIG. 11 TABLE III-D (BOTH FLANGES)
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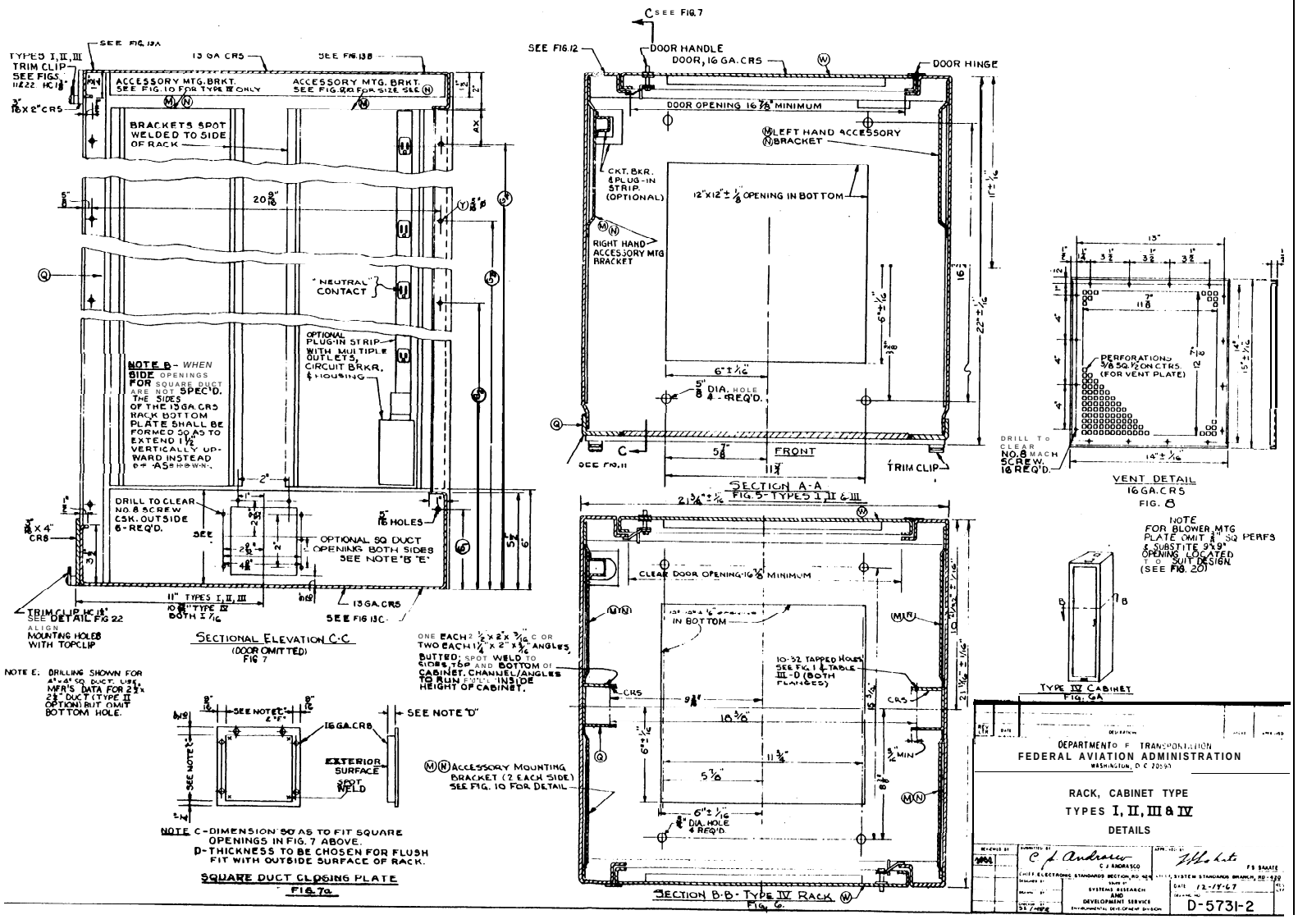
(M)(N) ACCESSORY MOUNTING BRACKET (2 EACH SIDE) SEE FIG. 10 FOR DETAIL
8" DIA. HOLE 4 REQ'D
SECTION B-B - TYPE IV RACK (M) FIG. 6
PERFORATIONS 5/8 SQ. 1/2 ON CTRS. (FOR VENT PLATE)
DRILL TO CLEAR NO. 8 MACH SCREW 16 REQ'D.
VENT DETAIL 16 GA. CRS FIG. 8
NOTE FOR BLOWER MTG PLATE - OMIT 3" SQ PERFS & SUBSTITUTE 9" x 9" OPENING LOCATED TO SUIT DESIGN (SEE FIG. 20)
TYPE IV CABINET FIG. 6A
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591
RACK, CABINET TYPE
TYPES I, II, III & IV
DETAILS
C. J. ANDRASCO
SYSTEMS RESEARCH AND DEVELOPMENT SERVICE
12-17-67
D-5731-2


TYPES I, II, III
SEE FIG. 13A
13 GA CRS
SEE FIG. 13B
TRIM CLIP SEE FIGS. 11, 22, HC18
ACCESSORY MTG. BRKT. SEE FIG. 10 FOR TYPE IV ONLY
ACCESSORY MTG. BRKT. SEE FIG. 9, 10 FOR SIZE SEE (N)
BRACKETS SPOT WELDED TO SIDE OF RACK
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DRILL TO CLEAR NO. 8 SCREW CSK. OUTSIDE 6 REQ'D.
OPTIONAL SQ. DUCT OPENINGS BOTH SIDES SEE NOTE 'B' 'E'
16 HOLES
11" TYPES I, II, III
10 1/16" TYPE IV BOTH I 7/16
13 GA. CRS
SEE FIG 13C
TRIM CLIP HC18 SEE DETAIL FIG 22
ALIGN MOUNTING HOLES WITH TOPCLIP
SECTIONAL ELEVATION C-C (DOOR OMITTED) FIG 7
NOTE E: DRILLING SHOWN FOR 4" x 4" SQ. DUCT. USE MFR'S DATA FOR 2 1/2" x 2 1/2" DUCT (TYPE II OPTION) BUT OMIT BOTTOM HOLE.
SEE NOTE 'C'
16 GA. CRS
SEE NOTE 'D'
EXTERIOR SURFACE SPOT WELD
NOTE C - DIMENSION 'S' AS TO FIT SQUARE OPENINGS IN FIG. 7 ABOVE.
D - THICKNESS TO BE CHOSEN FOR FLUSH FIT WITH OUTSIDE SURFACE OF RACK.
SQUARE DUCT CLOSING PLATE FIG. 7a
SEE FIG 7
SEE FIG 12
DOOR HANDLE
DOOR, 16 GA. CRS
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12" X 12" ± 1/8" OPENING IN BOTTOM
(M)(N) RIGHT HAND ACCESSORY MTG BRACKET
5" DIA. HOLE 4 - REQ'D.
FRONT
TRIM CLIP
SEE FIG. 11
SECTION A-A FIG. 5 - TYPES I, II & III
CLEAR DOOR OPENING 16 7/8" MINIMUM
10-32 TAPPED HOLES SEE FIG. 11 TABLE III-D (BOTH FLANGES)
CRS
SECTION B-B - TYPE IV RACK FIG. 6
ONE EACH 2 1/2" x 2" x 3/16" C OR TWO EACH 1 1/4" x 2" x 3/16" ANGLES BUTTED, SPOT WELD TO SIDES, TOP AND BOTTOM OF CABINET. CHANNEL/ANGLES TO RUN ENTIRE INSIDE HEIGHT OF CABINET.
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PERFORATIONS 3/8 SQ. 1/2" ON CTRS. (FOR VENT PLATE)
DRILL TO CLEAR NO. 8 MACH SCREW 16 REQ'D.
VENT DETAIL 16 GA. CRS FIG. 8
NOTE FOR BLOWER MTG PLATE OMIT 3 SQ PERFS & SUBSTITUTE 9" x 9" OPENING LOCATED TO SUIT DESIGN (SEE FIG. 20)
TYPE IV CABINET FIG. 6A
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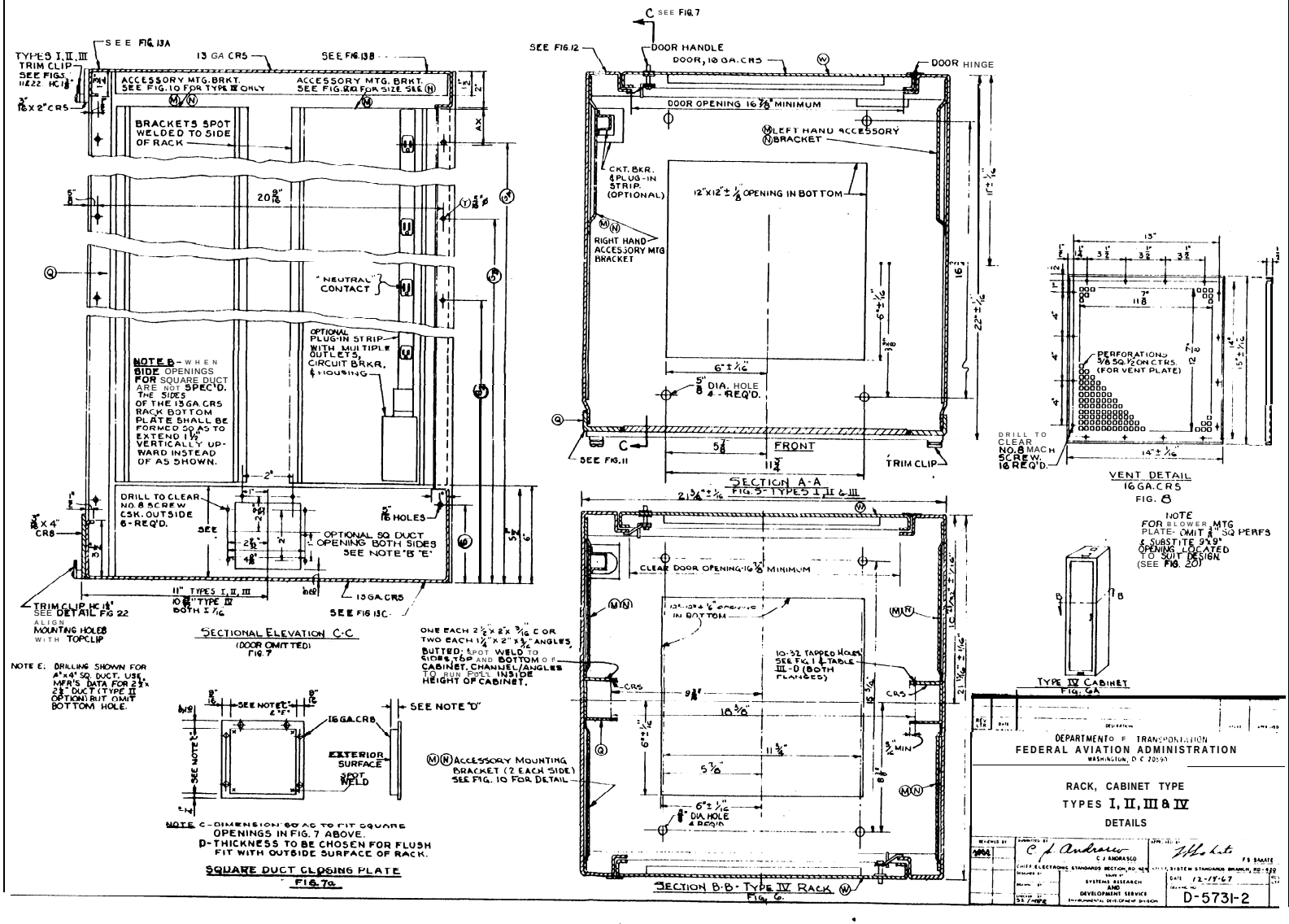
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591
RACK, CABINET TYPE
TYPES I, II, III & IV
DETAILS
C. J. ANDRASCO
CHIEF, ELECTRONIC STANDARDS SECTION, RD-624
F.B. BAKATE
CHIEF, SYSTEM STANDARDS BRANCH, RD-620
SYSTEMS RESEARCH AND DEVELOPMENT SERVICE
ENVIRONMENTAL DEVELOPMENT DIVISION
12-17-67
D-5731-2


TYPES I, II, III TRIM CLIP SEE FIGS. 11&22 HC18
SEE FIG. 13A
13 GA CRS
SEE FIG. 13B
ACCESSORY MTG. BRKT. SEE FIG. 10 FOR TYPE III ONLY
ACCESSORY MTG. BRKT. SEE FIG. 9 & 10 FOR SIZE SEE (N)
BRACKETS SPOT WELDED TO SIDE OF RACK
20 9/16"
"NEUTRAL" CONTACT
OPTIONAL PLUG-IN STRIP WITH MULTIPLE OUTLETS, CIRCUIT BRKR. & HOUSING
NOTE B - WHEN SIDE OPENINGS FOR SQUARE DUCT ARE NOT SPEC'D. THE SIDES OF THE 13 GA CRS RACK BOTTOM PLATE SHALL BE FORMED SO AS TO EXTEND 1 1/2" VERTICALLY UPWARD INSTEAD OF AS SHOWN.
DRILL TO CLEAR NO. 8 SCREW CSK. OUTSIDE 6 - REQ'D.
OPTIONAL SQ. DUCT OPENING BOTH SIDES SEE NOTE "B" "E"
16 HOLES
TRIM CLIP HC18 SEE DETAIL FIG 22
ALIGN MOUNTING HOLES WITH TOPCLIP
11" TYPES I, II, III
10 5/8" TYPE IV BOTH I 7/16
13 GA. CRS
SEE FIG 13C
SECTIONAL ELEVATION C-C (DOOR OMITTED) FIG. 7
NOTE E: DRILLING SHOWN FOR 8" x 4" SQ. DUCT. USE MFR'S DATA FOR 2 1/2" x 2 3/4" DUCT (TYPE III OPTION) BUT OMIT BOTTOM HOLE.
SEE NOTE "C"
SEE NOTE "D"
16 GA. CRS
EXTERIOR SURFACE SPOT WELD
NOTE C - DIMENSION SO AS TO FIT SQUARE OPENINGS IN FIG. 7 ABOVE.
D - THICKNESS TO BE CHOSEN FOR FLUSH FIT WITH OUTSIDE SURFACE OF RACK.
SQUARE DUCT CLOSING PLATE FIG. 7a
C SEE FIG. 7
SEE FIG. 12
DOOR HANDLE
DOOR, 16 GA. CRS
DOOR HINGE
DOOR OPENING 16 7/8" MINIMUM
(M) LEFT HAND ACCESSORY (N) BRACKET
CKT. BKR. & PLUG-IN STRIP. (OPTIONAL)
12" X 12" ± 1/8" OPENING IN BOTTOM
(M)(N) RIGHT HAND ACCESSORY MTG BRACKET
6" ± 1/16"
5" DIA. HOLE 4 - REQ'D.
SEE FIG. 11
FRONT
TRIM CLIP
SECTION A-A FIG. 5 - TYPES I, II & III
CLEAR DOOR OPENING 16 1/8" MINIMUM
10-32 TAPPED HOLES SEE FIG. 11 TABLE III-D (BOTH FLANGES)
ONE EACH 2 1/2" x 2" x 3/16" C OR TWO EACH 1 1/4" x 2" x 3/16" ANGLES BUTTED & SPOT WELD'D TO SIDES, TOP AND BOTTOM OF CABINET. CHANNEL/ANGLES TO RUN FOOT-INSIDE HEIGHT OF CABINET.
(M)(N) ACCESSORY MOUNTING BRACKET (2 EACH SIDE) SEE FIG. 10 FOR DETAIL
8" DIA. HOLE 4 REQ'D
SECTION B-B - TYPE IV RACK (M) FIG. 6
PERFORATIONS 5/8 SQ. 1/2 ON CTRS. (FOR VENT PLATE)
DRILL TO CLEAR NO. 8 MACH SCREW 16 REQ'D.
VENT DETAIL 16 GA. CRS FIG. 8
NOTE FOR BLOWER MTG PLATE - OMIT 3" SQ PERFS & SUBSTITUTE 9" x 9" OPENING LOCATED TO SUIT DESIGN (SEE FIG. 20)
TYPE IV CABINET FIG. 6A
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591
RACK, CABINET TYPE
TYPES I, II, III & IV
DETAILS
C. J. ANDRASCO
SYSTEMS RESEARCH AND DEVELOPMENT SERVICE
12-17-67
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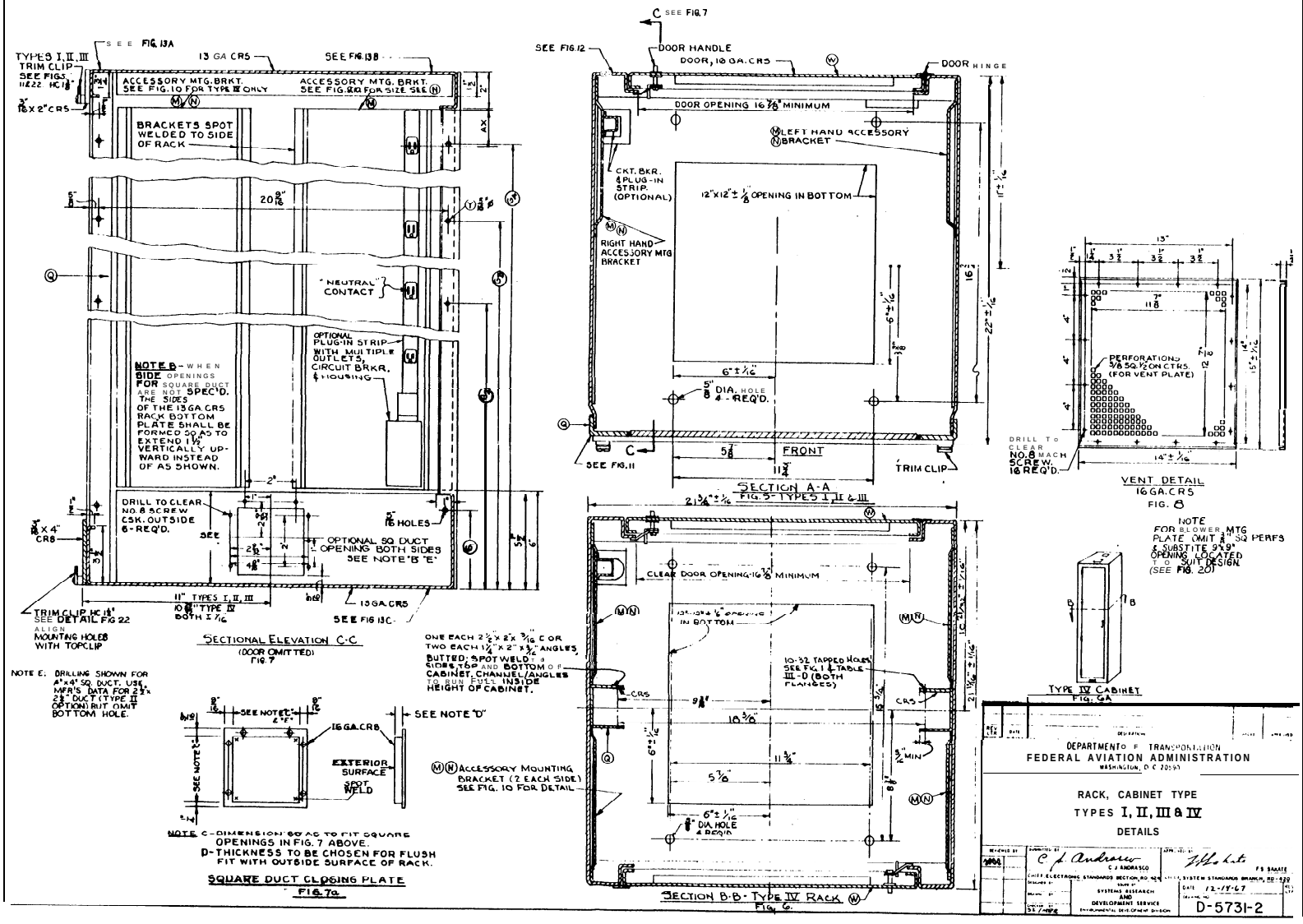
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SEE FIG 13C
TRIM CLIP HC18 SEE DETAIL FIG 22
ALIGN MOUNTING HOLES WITH TOPCLIP
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NOTE E: DRILLING SHOWN FOR 8"x4" SQ. DUCT. USE MFR'S DATA FOR 2 1/2"x 2 3/4" DUCT (TYPE III OPTION) BUT OMIT BOTTOM HOLE.
SEE NOTE "C"
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8" DIA. HOLE 4 REQ'D
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TYPE IV CABINET FIG. 6A
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591
RACK, CABINET TYPE
TYPES I, II, III & IV
DETAILS
SYSTEMS RESEARCH AND DEVELOPMENT SERVICE
ENVIRONMENTAL DEVELOPMENT DIVISION
DATE 12-17-67
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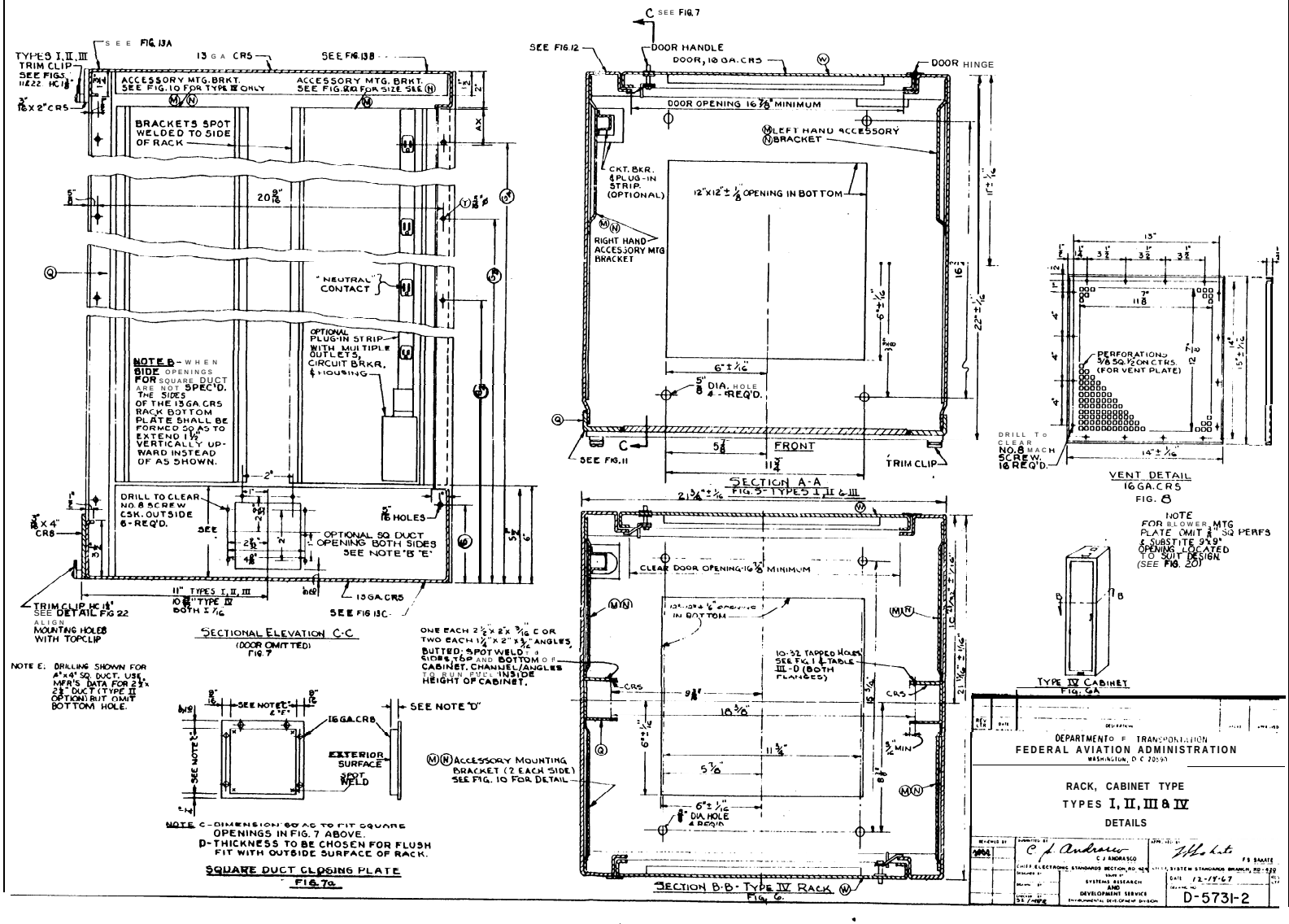
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